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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,527	05/08/2006	Andreas Knecht	MO-04038-US	9481

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EXAMINER

CHANG, CHING

ART UNIT	PAPER NUMBER
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3748

MAIL DATE	DELIVERY MODE
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05/09/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/578,527	KNECHT ET AL.	
	Examiner	Art Unit	
	CHING CHANG	3748	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/8/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office acknowledges the Preliminary Amendment filed on 5/8/06. Claims 1-10 are cancelled, and new claims 11-20 are added as requested.

Oath/Declaration

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not identify the citizenship of each inventor properly. The citizenship of the inventor, Andreas Knecht, in this application should be -- Germany --, instead of " German " therein.

Claim Objections

2. Claims 11-20 are objected to because of the following informalities:

- " device " in line 2 of claim 11 should be -- system --.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. ***Claims 11-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Komazawa et al. (US Patent 6,408,807).***

Komazawa discloses a camshaft adjusting system (See Fig. 1) for an internal combustion engine, the camshaft adjusting device comprising: a camshaft adjusting device with a first hydraulic chamber (R1) and a second hydraulic chamber (R2), wherein the first and second hydraulic chambers act in opposition to one another; a control valve group (100) working as a 4/4-way valve system and comprising a first connection (101) to the first hydraulic chamber, a second connection (102) to the second hydraulic chamber, a tank connection (107), and a connection (106) for pressurization; wherein the camshaft adjusting system in a first state of the control valve group, when starting the internal combustion engine, is pressure-relieved relative to the tank connection by simultaneously hydraulically connecting the first and second connections of the camshaft adjusting device so that the camshaft adjusting device moves into a dwell position with a single locking mechanism (B) and said dwell position also provides a safety function in case of system failure; wherein the first state is the operating end time state of the camshaft adjusting system; wherein the 4/4-way valve has a second state for a retarded adjustment of the camshaft adjusting device, wherein in the second state the first connection is connected to the tank connection and the second connection is connected to the connection for pressurization; wherein the 4/4-way valve has a third state for a holding position of the camshaft adjusting device, in which holding position the first and second connections are simultaneously disconnected from the tank connection and the connection for pressurization; wherein

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the 4/4-way valve has a fourth state for an advance adjustment of the camshaft adjusting device, in which fourth state the first connection is connected to the connection for pressurization and the second connection is connected to the tank connection (See Fig. 12); wherein the first, second, third, and fourth states are adjusted by a linear movement of a hydraulic piston of the 4/4-way valve, wherein the first, second, third, and fourth states are sequentially reached in accordance with the ordinal number assigned to the first, second, third, and fourth states, respectively, wherein a movement between the first, second, third, and fourth states is possible into a state of the next higher or next lower ordinal number; wherein the 4/4-way valve is a cartridge valve that is spring-loaded at one end and comprises a sleeve and a hydraulic hollow piston (104) adapted for tank pressure relief, wherein the first, second, third, and fourth states are determined by an overlap between the hollow piston and the sleeve; wherein, when the camshaft adjusting system is pressure-relieved, the camshaft adjusting device automatically moves into the dwell position during the period of the first state; wherein the locking mechanism locks in the first state and unlocks when a predetermined pressure difference between the first and second hydraulic chambers is exceeded; wherein the camshaft adjusting device is an oscillating motor camshaft adjusting device; wherein a turn-off state of the camshaft adjusting system is determined by a no-load voltage, a no-load current, or a no-load pulse-width signal when dropping below a threshold value.

5. ***Claims 11-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Komazawa et al. (US Patent 6,684,835).***

Komazawa discloses a camshaft adjusting system (See Fig. 1) for an internal combustion engine, the camshaft adjusting device comprising: a camshaft adjusting device with a first hydraulic chamber (43) and a second hydraulic chamber (42), wherein the first and second hydraulic chambers act in opposition to one another; a control valve group (76) working as a 4/4-way valve system and comprising a first connection (72) to the first hydraulic chamber, a second connection (71) to the second hydraulic chamber, a tank connection (75c), and a connection (77m) for pressurization; wherein the camshaft adjusting system in a first state of the control valve group, when starting the internal combustion engine (See Fig. 2), is pressure-relieved relative to the tank connection by simultaneously hydraulically connecting the first and second connections of the camshaft adjusting device so that the camshaft adjusting device moves into a dwell position with a single locking mechanism (6; 6B) and said dwell position also provides a safety function in case of system failure; wherein the first state is the operating end time state of the camshaft adjusting system; wherein the 4/4-way valve has a second state for a retarded adjustment of the camshaft adjusting device, wherein in the second state the first connection is connected to the tank connection and the second connection is connected to the connection for pressurization; wherein the 4/4-way valve has a third state for a holding position of the camshaft adjusting device, in which holding position the first and second connections are simultaneously disconnected from the tank connection and the connection for pressurization; wherein the 4/4-way valve has a fourth state for an advance adjustment of the camshaft adjusting device, in which fourth state the first connection is connected to the

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connection for pressurization and the second connection is connected to the tank connection (See Figs. 6A-6B; 11-25); wherein the first, second, third, and fourth states are adjusted by a linear movement of a hydraulic piston of the 4/4-way valve, wherein the first, second, third, and fourth states are sequentially reached in accordance with the ordinal number assigned to the first, second, third, and fourth states, respectively, wherein a movement between the first, second, third, and fourth states is possible into a state of the next higher or next lower ordinal number; wherein the 4/4-way valve is a cartridge valve that is spring-loaded at one end and comprises a sleeve and a hydraulic hollow piston (85) adapted for tank pressure relief, wherein the first, second, third, and fourth states are determined by an overlap between the hollow piston and the sleeve; wherein, when the camshaft adjusting system is pressure-relieved, the camshaft adjusting device automatically moves into the dwell position during the period of the first state; wherein the locking mechanism locks in the first state and unlocks when a predetermined pressure difference between the first and second hydraulic chambers is exceeded; wherein the camshaft adjusting device is an oscillating motor camshaft adjusting device; wherein a turn-off state of the camshaft adjusting system is determined by a no-load voltage, a no-load current, or a no-load pulse-width signal when dropping below a threshold value.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHING CHANG whose telephone number is (571)272-4857. The examiner can normally be reached on M-Th, 7:00 AM -5:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Denion can be reached on (571)272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ching Chang/
Primary Examiner, Art Unit 3748